

**DRAFT SCREENING SITE INVESTIGATION
FOR THE
CAR-MOR METAL COMPANY SITE
GAUL AND GORDON STREETS
PHILADELPHIA, PENNSYLVANIA
ECKEL SITE NUMBER 307**

Prepared for

U.S. Environmental Protection Agency Region 3
Hazardous Site Cleanup Division
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Philadelphia, PA 19103

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Project No. I4185.47502.0903

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1.0 INTRODUCTION

Under Remedial Action Contract (RAC) No. 68-S7-3002, Work Assignment No. 048-PAPA-03ZZ, U.S. Environmental Protection Agency (EPA) Region 3 tasked Tetra Tech, Inc. (Tt), to assist EPA Region 3 in the assessment of properties suspected to have been former lead smelter foundries. Tt subcontracted completion of this work assignment to Tetra Tech EM Inc. (Tetra Tech).

Former lead smelter sites nationwide were identified in an April 2001 article published in the American Journal of Public Health by Eckel, and others (Eckel study) (Reference [Ref.] 1). The majority of these lead smelters operated prior to 1964 and closed before the current environmental regulations were instituted. As part of the Eckel study, soil samples were collected from several of the identified former lead smelter properties. Results from the analysis of these soil samples indicated that concentrations of lead exceeded EPA's recommended screening level for lead in residential soils. The results of the Eckel study indicate that the air disposition of lead into soils from the former smelter operations may present an ongoing public health concern due to exposure of residential populations, especially children, located in the vicinity of these former lead smelters, to soils containing elevated concentrations of lead (Refs. 1, 2, and 3).

The Eckel study identified 77 properties that may have been formerly used as lead smelters within EPA Region 3 (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia). EPA Region 3 is currently investigating these 77 properties. The objective of EPA's investigation of these properties is to (1) determine the potential for lead-contaminated soil to be present at the former lead smelter site or nearby properties (2) identify any populations that may be at risk to exposure to this soil, and (3) determine if soil sampling is warranted at any of these sites or nearby properties.

The following activities were completed as part of the initial screening investigation of each of these former lead smelter sites: (1) verify the former lead smelter address listed in the Eckel

study through historical Sanborn fire insurance maps, tax parcel information, and/or contacting local agencies, (2) determine if the site is listed in EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database, (3) determine through census information and existing maps the number of schools, daycare centers or recreational parks that exist near the former lead smelter site, (4) determine the population residing within a 4-mile radius of the site, (5) conduct a windshield reconnaissance of the site and surrounding area to document the current land use, identify any exposed soil and verify the existence of any schools, daycare centers or parks in the immediate area, and (6) review all information acquired to determine if the collection and analysis of soil samples is warranted at the site or at any nearby property.

This report summarizes the findings of the tasks outlined above for the former lead smelter known as the Car-Mor Metal Company site located at the intersection of Gaul and Gordon Streets, Philadelphia, Pennsylvania, 19125. Each former smelter property was given a number in Eckel's study. The Eckel study number for this site is 307 (Ref. 1).

2.0 SITE LOCATION

The former Car-Mor Metal Company facility was located at the intersection of Gaul and Gordon Streets, Philadelphia, Pennsylvania, 19125. The geographic coordinates of the former Car-Mor Metal Company facility are 39° 58' 37" north latitude and 75° 7' 28" west longitude on the Philadelphia, Pennsylvania Quadrangle, 7.5 minute series, United States Geological Survey topographic map (see Appendix A, Figure 1). The site is not currently listed in EPA's CERCLIS database (Ref. 4). An aerial photograph of the vicinity of the former lead smelter site has been included in Appendix A, Figure 2. This aerial photograph reveals the exposed soils and any identified areas of potential concern such as schools, daycare centers, or parks located within a half-mile radius of the site.

3.0 SITE OBSERVATIONS

On December 16, 2005, Tetra Tech completed a non-sampling windshield reconnaissance of the Car-Mor Metal Company site and surrounding area. A photographic record of the current site conditions is included in Appendix B. Figure 3, shows the current layout of the site and surrounding area as observed during Tetra Tech's site reconnaissance. The following observations were recorded:

- The property is located in a primarily residential area of north Philadelphia. The property is presently occupied by Jack Edmundson Plumbing and Heating Company located at the southeast intersection of Gaul and East Gordon Streets. The building that currently occupies the property is approximately fifty feet wide by 100 hundred feet long and extends from Gaul Street to Belgrade Street at Gordon Street. No significant areas of exposed soil were observed on the former lead smelter property.
- Directly surrounding the property, to the north is a large four-story building occupied by the Jacob Holtz Company (manufactures furniture coasters), to the east is a residential dwelling and a one-story commercial building (Mercy Meats), to the south along the 2300 block of Belgrade Street are two-story row homes, and to the west along the 2500 block of Gordon Street are two-story residential row homes.
- The area surrounding the property is primarily residential with the exception of the Jacob Holtz building to the north. Small soil-covered yards were observed with the residential dwellings in the area directly surrounding the former lead smelter property.
- No schools, parks, or daycare facilities were identified in the immediate vicinity of the site.

4.0 POTENTIAL TARGETS

Potential targets identified that may be exposed to lead-contaminated soils remaining in the vicinity of the former Car-Mor Metal Company site include the nearby residential population. Because there are no exposed soils remaining on the former Car-Mor Metal Company property there is currently no threat to a worker population. The population within a 4-mile radius of the site is summarized in the table below (Ref. 5).

Population Within a Four-mile Radius of the Site

Distance Ring (miles)	Population (number of persons)
0.0 to 0.25	5,979
0.25 to 0.5	9,567
0.5 to 1.0	26,619
1.0 to 2.0	119,045
2.0 to 3.0	183,631
3.0 to 4.0	271,080

Source: U.S. Department of Commerce. Landview V Environmental Mapping Software based on the Bureau of Census 2000 Population Data. December 6, 2005.

No parks, schools or daycare centers have been identified in the area directly surrounding the site. Six schools have been identified within one-half mile of the site, including the Hackett School, Pennsylvania Treaty Junior High School, Adaire School, Saint Annes School, and Chandler School. Four parks are located within one-half mile of the site, three are unidentified, located to the west and southwest, Cione City Park is located northeast of the site.

5.0 FINDINGS AND RECOMMENDATIONS

The site is located in north Philadelphia in a primarily residential area. Small areas of exposed soils associated with residential yards were observed in the vicinity of the former lead smelter property. No parks, schools, or daycare facilities were identified in the immediate vicinity of the

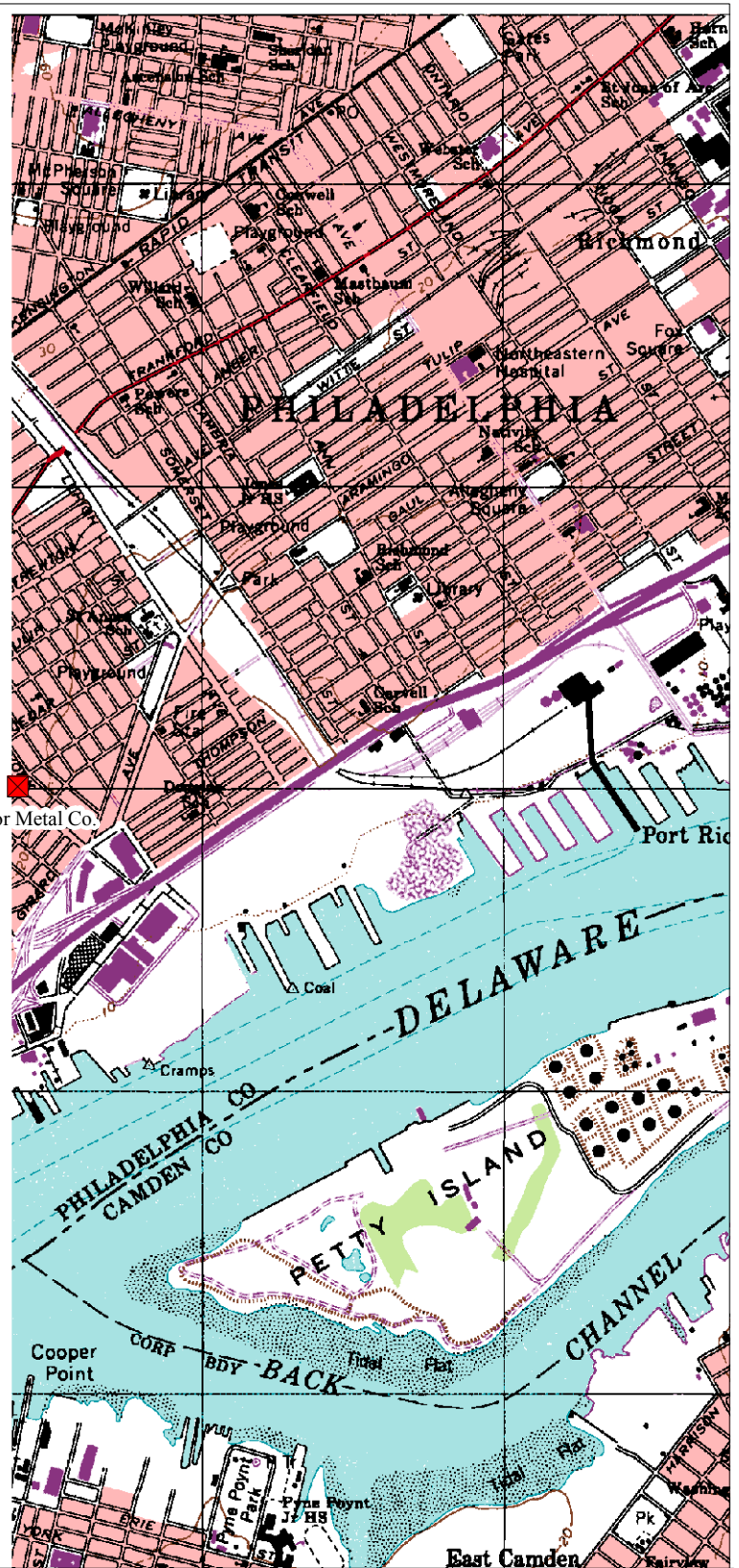
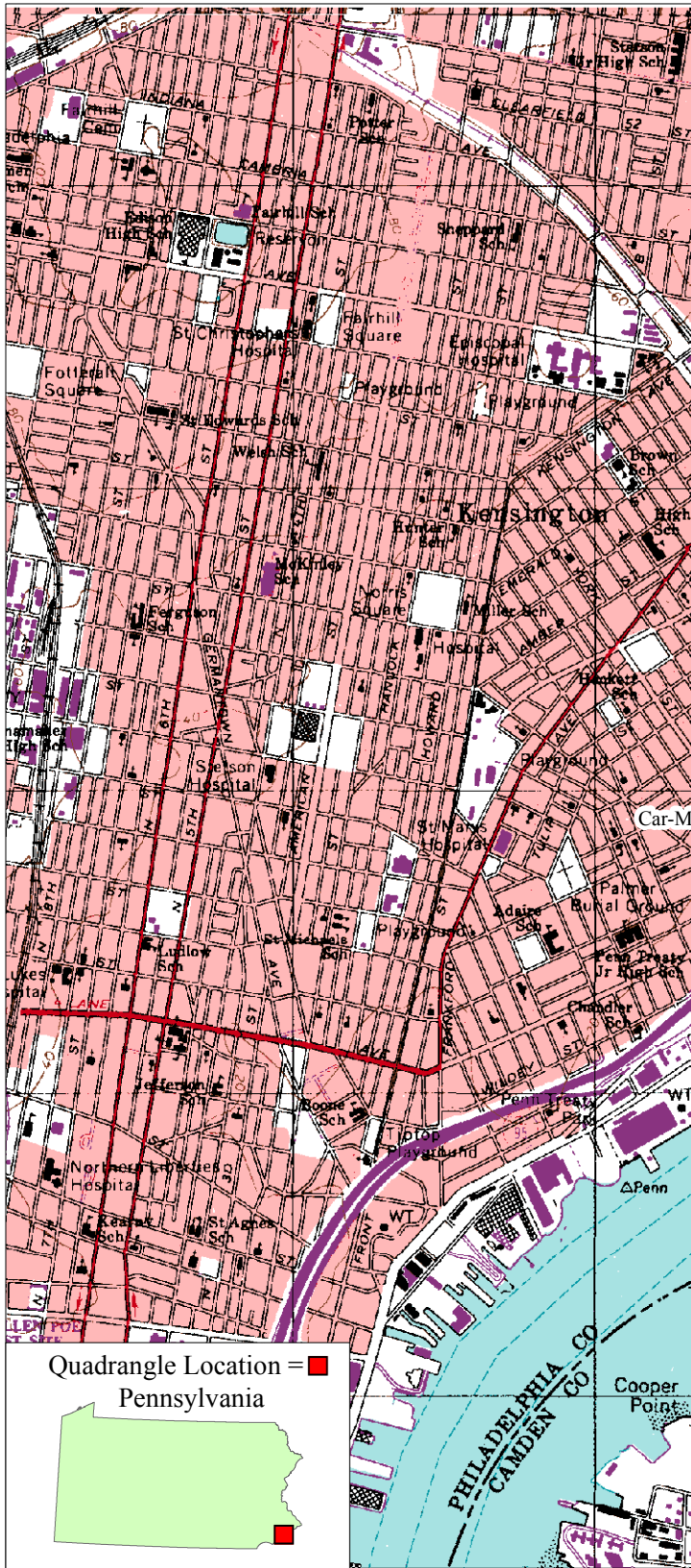
site. The former lead smelter property is located in a predominately residential area; therefore, to determine if there is a threat to the residential population from elevated levels of lead in soils, it is recommended that soil samples be collected from nearby residential yards and analyzed for lead levels.

REFERENCES

1. Eckel, W.P., Rabinowitz, M.B., Foster, G.D. American Journal of Public Health.
“Discovering Unrecognized Lead-Smelting Sites by Historical Methods”. April 2001.
2. Pennsylvania Department of Health. Suspected Former Lead Smelter Sites: A Potential Risk Factor for Childhood Lead Poisoning. August 2004.
3. U.S. Environmental Protection Agency (EPA). Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities. OSWER Directive 9355.4-12. July 14, 1994.
4. U.S. EPA. Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) database. On-Line Address:
<http://cfpub.epa.gov/supercpad/cursites/srchsites.cfm>
5. U.S. Census Bureau. State and County Quick Facts. Accessed On-Line on December 6, 2005. On-Line Address: quickfacts.census.gov/qfd/states/42.html.

Appendix A

Figures



Quadrangle Location = ■
Pennsylvania



0 1,000 2,000
Feet
Scale in Feet

Car-Mor Metal Company
2320 Gaul Street
Philadelphia, Pennsylvania
Eckel Site No. 307

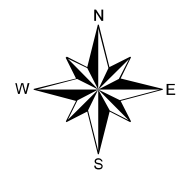


Figure 1
Site Location Map



Source: Modified from USGS, Philadelphia and Camden,
Pennsylvania-New Jersey Quadrangles, 1995.



Car-Mor Metal Company
2320 Gaul Street
Philadelphia, Pennsylvania
Eckel Site No. 307

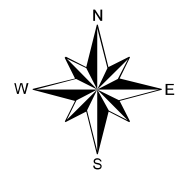


Figure 2
Aerial Photograph



Source: Modified from USGS, 2002, and ESRI, 2005.



Car-Mor Metal Co.
2320 Gaul Street
Philadelphia, Pennsylvania
Eckel Site No. 307

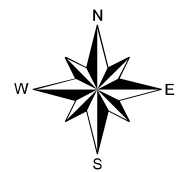


Figure 3
Site Layout Map



Source: Modified from the City of Philadelphia 1996, 2000, and 2003.

Appendix B
Photographic Documentation



Photographic Documentation

Site Name: Car-Mor Metal Company- Eckel Number 307

Prepared by: Tetra Tech EM Inc.

Location: Gaul and Gordon Streets, Philadelphia, Pennsylvania

Photographer: [REDACTED]

Photograph No. 1

Photograph Date: September 6, 2005

Description: View of the front of the building that currently occupies the lead smelter property.



Photograph No. 2

Photograph Date: September 6, 2005

Description: Facing south from the front of the property showing the two-story row homes along Belgrade Street.





Photographic Documentation

Site Name: Car-Mor Metal Company- Eckel Number 307

Prepared by: Tetra Tech EM Inc.

Location: Gaul and Gordon Streets, Philadelphia, Pennsylvania

Photographer: [REDACTED]

Photograph No. 3

Photograph Date: September 6, 2005

Description: View of property facing north from intersection of Belgrade and Gordon Streets.



Photograph No. 4

Photograph Date: September 6, 2005

Description: View of residential dwellings along Gordon and Belgrade Street.





Photographic Documentation

Site Name: Car-Mor Metal Company- Eckel Number 307

Prepared by: Tetra Tech EM Inc.

Location: Gaul and Gordon Streets, Philadelphia, Pennsylvania

Photographer: [REDACTED]

Photograph No. 5

Photograph Date: September 6, 2005

Description: View of commercial building located north of the former lead smelter.



Photograph No. 6

Photograph Date: September 6, 2005

Description: View of driveway located adjacent, to the northeast of the property.





Photographic Documentation

Site Name: Car-Mor Metal Company- Eckel Number 307

Prepared by: Tetra Tech EM Inc.

Location: Gaul and Gordon Streets, Philadelphia, Pennsylvania

Photographer: [REDACTED]

Photograph No. 7

Photograph Date: September 6, 2005

Description: View of the residential property located directly north of the property.

